



Exhibit D

#11
8/2/90
A.S

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

AFFIDAVIT

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Commissioner:

I, Dale E. Fiene, herewith affirm as follows.

(A) I was born on April 24, 1945; and I am a U.S. Citizen.

(B) I presently live at 337 North Chestnut, Addison,
Illinois 60101.

(C) In June 1967 I graduated, with honors, with a Bachelor
of Science Degree in Electrical Engineering from Valparaiso
University in Valparaiso, Indiana; and

I am a member of Tau Beta Pi, an Engineering honors
society.

(D) I have practiced Electrical and Electronics Engineering since June 1967, as follows.

1. Between June 1967 and February 1970, at Honeywell Inc., as an Associate Systems Analyst Engineer, I developed analog and digital computer simulations of automatic control systems to predict performance and improve stability.

2. Between February 1970 and May 1978, at Honeywell Inc., as a Design Engineer and Project Manager, I was responsible for the design and development of fire and security alarm systems.

3. Between May 1978 and June 1982, at Fyrnetics Inc. of Elgin, Illinois, as Electrical Engineering Manager, I was responsible for the design and development of fire alarms, home security products and electronic lighting products.

4. Between June 1982 and April 1987, at Fyrnetics Inc., as Director of Engineering, I directed the activities of a group that designed and developed a complete line of electronic fluorescent lamp ballasts as well as other electronic lighting-related power supplies such as inverter-type power supplies for track lighting applications.

5. Between April 1987 and April 1989, at Seatt Corporation of Downers Grove, Illinois, I managed the development of fire alarms, electronic setback thermostats and electronic lighting products.

6. In April 1989, I formed my own company, International Product Development, Inc. The main charter of this company is research and development of electrical lighting products, such as ballast for gas discharge lamps and power converter for Halogen lamps. Since April 1989, I have worked full time at various projects aimed at the development of more cost-effective electronic ballasts for gas discharge lamps as well as several other projects related to application of electronics technology to lighting.

(E) In total, I have spent more than 10 years in the design and evaluation of electronic lighting products in general and of inverter-type power supplies for Halogen Lamps as well as inverter-type fluorescent lamp ballasts in particular.

(F) I have read and I understand the claims in U.S. patent application Serial No. 06/889,746;

I have read and I am familiar with the teachings of the following four U.S. Letters Patents: No. 2,587,169 to Kivari (hereinafter "Kivari"), No. 3,496,518 to Neumann et al. ("Neumann"), No. 4,207,498 to Spira et al. ("Spira"), and No. 4,506,318 to Nilssen ("Nilssen"); and

I herewith provide the following evaluations and opinions.

(1) In my opinion, to use Kivari's lamp in Neumann's track lighting system or in connection with Spira's gas discharge lighting system, would be highly unusual -- to say the least.

One reason why Kivari's lamp would not be considered for those applications is that it can not operate in the manner claimed by Kivari and at the same time provide what would generally be considered as a useful amount of light output.

Moreover, in my opinion, a person having ordinary skill in the pertinent art would realize that the lamp proposed by Kivari does not constitute a lamp having any identifiable utility in the type of application associated with Neumann's track lighting system or with Spira's gas discharge lighting system.

In particular, Kivari's transformer 19 is shown to be mounted within the neck of the lamp's glass envelope 12. This transformer is supposed to be powered from ordinary power line voltage (i.e., "110 volts A. C."). Yet, any power-line-operated transformer of size small enough to be placed within the neck portion of an incandescent lamp (such as indicated by Kivari) can not possibly provide at its secondary winding enough power to provide useful light output. A transformer of such size would be limited to provide a maximum power output substantially less than 1 Watt; which amount of power would yield substantially less than 10 Lumens of light. Yet, even the lowest-power incandescent lamp available (and capable of being used in the type of lamp socket indicated by Kivari) provides more than 100 Lumens. An ordinary 15 Watt household light bulb provides about 150 Lumens; which amount of light is generally considered as being grossly insufficient in most lighting applications, but especially for such applications as track lighting or general (i.e., fixtured) lighting.

Yet, the size of Kivari's incandescent element (14) is such as to require a power far higher than 100 Watt to cause it to incandesce at a color temperature within the range of utility for lighting applications.

(2) In my opinion, it would be highly unusual, as well as inappropriate, to distribute the high-frequency voltage in Spira's gas discharge lighting system by way of power tracks such as those described by Neumann.

My opinion is based on several facts and considerations, as follows.

(a) To distribute 1850 Watt of electric power at a frequency of 23 kHz to 25 lighting fixtures (each having two fluorescent lamps) in a lighting system of the type indicated by Spira would require very special distribution means in order to minimize detrimental effects arising because of the unusually high distribution frequency. Indeed, this fact is recognized by Spira in that he proposes a special transmission line for distributing his 23 kHz voltage (see his Fig. 2). Therefore, it would not seem reasonable to assume --- and certainly not obvious --- that power tracks of the type described by Neumann would be appropriate for distributing the 23 kHz voltage in Spira's lighting system.

(b) Lighting fixtures are normally hard-wired, and it would seem both unusual and inappropriate to distribute the power to the lighting fixtures in Spira's lighting system by way of power tracks and the associated plug-in connector means. That is, if power to the lighting fixtures were to be distributed by way of power tracks, the electrical connection between the lighting fixtures and the power track would have to be effected by some form of plug-in connector means; which type of electrical connection would generally not be considered acceptable on basis of fire safety issues, nor would it generally be considered acceptable under existing fire codes.

(c) Spira describes a lighting system consisting of a central source of 23 kHz voltage and a number of lighting fixtures. Since it would constitute highly unusual practice, since it would add a substantial amount of cost and complexity, and since it would be void of any discernable benefit, it would not seem reasonable (and certainly not obvious) to distribute power to these lighting fixtures by way of Neumann's power tracks as contrasted with ordinary conduited conductors or the special transmission line expressly proposed by Spira.

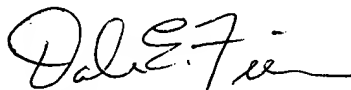
(3) In my opinion, the track lighting system defined by claim 1 of patent application Serial No. 06/889,746, does not constitute an obvious modification of Spira's teachings in view of the teachings of Kivari and Neumann.

Quite the contrary. With reference to my comments above, an appropriately skilled person would steer away from using power tracks for distributing the high-frequency voltage in Spira's lighting system. This person would likewise steer away from using Kivari's lamp in connection with Spira's lighting system as well as in connection with Neumann's track lighting system.

(4) With respect to the Nilssen reference, it is clear that his power supply may be used for powering the power tracks in Neumann's track lighting system. However, there is no indication whatsoever in Nilssen, Kivari and/or Neumann to the effect that there might be some benefit or advantage associated with so powering the power tracks in Neumann's track lighting system.

Neumann's track lighting system operates perfectly well when powered from ordinary 120Volt/60Hz power line voltage. On basis of the teachings of Nilssen, Kivari and/or Neumann, to power Neumann's track lighting system from a 30 kHz power supply would not offer any discernible benefit. Quite the contrary: interposing a 30 kHz power supply between the power line and the track lighting system would add inefficiency and cost without providing for any obvious benefit.

Again it is noted that the lamp described by Kivari does not constitute a lamp applicable in a track lighting system.



Dale E. Fiene

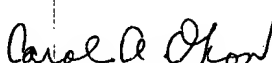
STATE OF ILLINOIS)

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SEAL

COUNTY OF MCHENRY)

Sworn to and subscribed before me this 12th day of
April, 1990.



Notary Public

